**Options** Variable **Variable Variable Variable Variable** Variable **Variable** Title: dsb fc multitone **ID:** samp rate **ID:** mu 1 **ID:** mu 2 ID: msg amp 1 ID: msg\_amp\_2 ID: carrier amp ID: fc Author: shashank Value: 32k Value: 500m Value: 750m Value: 2 Value: 3 Value: 4 Value: 10k Output Language: Python **Generate Options: QT GUI QT GUI Time Sink** Name: Message Signal 1 **Constant Source Number of Points:** 1.024k Constant: 500m Sample Rate: 32k Autoscale: Yes **Constant Source QT GUI Time Sink QT GUI Frequency Sink** Constant: 750m Name: Modulated Signal Name: Message Signal 1 Number of Points: 1.024k **FFT Size:** 1024 freq Sample Rate: 32k **Constant Source** Center Frequency (Hz): 0 Autoscale: Yes Constant: 1 Bandwidth (Hz): 32k Throttle Sample Rate: 32k Limit: None **QT GUI Frequency Sink** Name: Modulated Signal **Signal Source** Add Multiply out-**FFT Size:** 1024 Sample Rate: 32k Center Frequency (Hz): 0 Waveform: Cosine Bandwidth (Hz): 32k Frequency: 100 Add **OT GUI Time Sink** Amplitude: 2 Offset: 0 Name: Demodulated Signal\_1 Multiply **Initial Phase (Radians):** 0 **Number of Points:** 1.024k **Low Pass Filter** Sample Rate: 32k **Decimation:** 1 Autoscale: Yes **Signal Source** Multiply out Gain: 1 **DC Blocker** Sample Rate: 32k Sample Rate: 32k **Signal Source** Length: 32 Waveform: Cosine **Cutoff Freq: 100** Sample Rate: 32k Long Form: True **QT GUI Frequency Sink Transition Width:** 1 Frequency: 200 Waveform: Cosine Amplitude: 3 Window: Hamming Name: Demodulated Signal 1 Frequency: 10k Offset: 0 **Beta:** 6.76 freg **FFT Size:** 1024 Amplitude: 4 **Initial Phase (Radians):** 0 Center Frequency (Hz): 0 Offset: 0 Bandwidth (Hz): 32k **Initial Phase (Radians):** 0 **Signal Source** Sample Rate: 32k Multiply Waveform: Cosine **Low Pass Filter QT GUI Time Sink QT GUI Time Sink** Frequency: 10k **Decimation:** 1 Name: Demodulated Signal\_2 Name: Message Signal\_2 Amplitude: 1 Gain: 1 **DC Blocker Number of Points:** 1.024k Offset: 0 Number of Points: 1.024k Sample Rate: 32k Initial Phase (Radians): 0 Sample Rate: 32k Sample Rate: 32k Length: 32 Cutoff Freq: 500 Long Form: True Autoscale: Yes Autoscale: Yes **Transition Width: 1** Window: Hamming **Beta:** 6.76 **QT GUI Frequency Sink QT GUI Frequency Sink** Name: Message Signal\_2 **QT GUI Frequency Sink** Name: Demodulated Signal\_2 **FFT Size:** 1024 Name: LPF Input freq FFT Size: 1024 freq Center Frequency (Hz): 0 **FFT Size:** 1024 freq Center Frequency (Hz): 0 Bandwidth (Hz): 32k Center Frequency (Hz): 0 Bandwidth (Hz): 32k

Bandwidth (Hz): 32k